

Title (en)
THREE-DIMENSIONAL IMAGING SYSTEMS, COMPONENTS THEREOF, AND METHODS OF THREE-DIMENSIONAL IMAGING

Title (de)
FESTKÖRPERABBILDUNGSSYSTEME, KOMPONENTEN DAVON UND VERFAHREN ZUR FESTKÖRPERBILDERZEUGUNG

Title (fr)
SYSTÈMES D'IMAGERIE SOLIDE, COMPOSANTS DE CEUX-CI ET PROCÉDÉS D'IMAGERIE SOLIDE

Publication
EP 2748676 A2 20140702 (EN)

Application
EP 12783402 A 20120925

Priority
• US 201161539405 P 20110926
• US 2012057012 W 20120925

Abstract (en)
[origin: US2013075954A1] There is provided solid imaging methods and apparatus for making three-dimensional objects from solid imaging material. A tray with a film bottom is provided to hold solid imaging material that is selectively cured into cross-sections of the three-dimensional object being built. A coater bar is moved back and forth over the film to remove any uncured solid imaging material from a previous layer and to apply a new layer of solid imaging material. A sensor is provided to measure the amount of resin in the tray to determine the appropriate amount of solid imaging material to be added, from a cartridge, for the next layer. A shuttle, which covers the tray when the exterior door to the solid imaging apparatus is opened for setting up a build or removing a three-dimensional object, can also be used to move the coater bar and to selectively open one or more valves on the cartridge to dispense the desired amount of solid imaging material.

IPC 8 full level
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CPC (source: EP US)
B29C 64/106 (2017.07 - EP US); **B29C 64/129** (2017.07 - EP US); **B29C 64/194** (2017.07 - EP); **G03F 7/0037** (2013.01 - EP US); **B33Y 30/00** (2014.12 - EP US); **Y10T 29/4973** (2015.01 - EP US)

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